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Richard Rubin
Senior Attorney

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Room 1127M1
295 North Maple Avenue
Basking Ridge, NJ 07920-1002
(908) 221-4481

November 30, 2000

Ms. Magalie Roman Salas, Secretary
Federal Communications Commission
445 Twelfth Street, SW - Room TWB-204
Washington, DC 20554

Re: *Ex Parte* - CC Docket No. 00-176 /
Application by Verizon New England, Inc., Bell Atlantic Communications, Inc. (d/b/a Verizon Long Distance), NYNEX Long Distance Company (d/b/a Verizon Enterprise Solutions), and Verizon Global Networks Inc. for Authorization to Provide In-Region InterLATA Services in Massachusetts

Dear Ms. Salas:

Yesterday afternoon, Charles Griffin, Michael Lieberman, Richard Clarke, and I (all of AT&T) met with Richard Lerner, Jennifer McKee, Carol Canteen, and Richard Kwiatkowski of the Common Carrier Bureau's Competitive Pricing Division. We discussed AT&T's positions on Verizon's Massachusetts 271 application, as previously advanced in this proceeding. A copy of the talking points used at this meeting is attached.

During this meeting, we reaffirmed that Verizon's recently provided margin analysis contained significant errors that lead to unsupported and erroneous conclusions about the openness of the local exchange market in Massachusetts and the prospects for viable and sustainable local exchange competition in the residential market. Indeed, the current UNE rates are not TELRIC-based and are excessive. They therefore foreclose the possibility that AT&T or any other Competitive Local Exchange Carrier will enter the residential market by relying primarily or exclusively on UNEs to provide competitive local exchange services.

As WorldCom has previously demonstrated, Verizon's network element prices in Massachusetts are far too high to support profitable broad-based entry to serve residential consumers. That is powerful evidence that Verizon's unbundled network element ("UNE") prices are not appropriately cost-based. Forward-looking costs are,

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by definition, the costs that Verizon incurs in providing the elements of its network to its own retail arm. Verizon unquestionably earns a healthy profit on its own local services business, and if its UNE rates are so high that competitors cannot do so, those rates simply cannot be cost based. Moreover, there obviously could be no legitimate finding that Massachusetts local markets are irreversibly open if Verizon's UNE prices preclude profitable UNE-based entry for millions of residential customers. Accordingly, evidence that broad-based competition is impossible at prevailing UNE rates is highly probative of both compliance with checklist item two, 47 U.S.C. § 271(c)(2)(B)(ii), and of the separate public interest determination that the Commission must make, *id.* § 271(d)(3)(C). See November 2, 2000 Reply Comments of AT&T Corp. at 24-26. See also *Memorandum Opinion and Order*, Application Of Ameritech Michigan Pursuant To Section 271 Of The Communications Act Of 1934, As Amended, To Provide In-Region, InterLATA Services In Michigan, 12 FCC Rcd. 20,543 (1997), ¶ 289 ("In ascertaining whether a BOC has complied with the competitive checklist regarding pricing for interconnection, unbundled network elements, and transport and termination pursuant to section 251, it is critical that prices for these inputs be set at levels that encourage efficient market entry"). Indeed, it is indisputable that the decisions of this and the New York Public Service Commission to support Verizon's section 271 application for New York were driven by the PSC's confidence, supported by the fact of entry in addition to analysis, that New York rates satisfied this standard. *Memorandum Opinion and Order*, In The Matter Of Application By Bell Atlantic New York For Authorization Under Section 271 Of The Communications Act To Provide In-Region, InterLata Service In The State Of New York, CC Docket No. 99-295, 15 FCC Rcd. 3953 (1999), ¶ 6 (citing fact that New York "has some of the most intensely competitive local exchange and exchange access markets in the nation" and stating that this "track record of successful competition places the present application" in a superior "context" to other filings); *id.* ¶ 13 (finding it significant that "[c]ompetitors in New York are able to enter the market using all three entry paths provided under the Act."). Of course, entry has not occurred in Massachusetts, and the analyses submitted by WorldCom demonstrates why that is so.

Verizon's Analysis is Unsupported. Recognizing this fact, Verizon now claims that WorldCom's analysis "inflates costs and understates revenues," and that if entrants would only give Verizon's Massachusetts UNEs a try, they would find themselves enjoying gross margins (before retailing costs) of 48 to 74 percent. See, e.g., November 21, 2000 ex parte Letter from Dee May, Executive Director, Federal Regulatory, Verizon to Ms. Magalie Roman Salas ("November 21 Verizon Ex Parte"). But Verizon is wrong, and its unsupported claims cannot be credited. Verizon has provided no backup documentation for its *ex parte* black box analysis. Critically, Verizon fails to supply, at least on the public record, the assumptions or calculations underlying its most critical assertions, and it does not even indicate the source or

vintage for much of the data it has used. Rather, Verizon simply declares its analyses to be based on "average" costs and revenues.

In the absence of the underlying data, assumptions and calculations, neither the Commission nor other parties can test fully the validity of Verizon's assertions, and Verizon cannot meet its burden of proof. Indeed, it is impossible for any party, including the Commission, to do a comprehensive analysis of Verizon's conclusions, given the paucity of information in its *ex partes* regarding data, assumptions, and calculations. Verizon should have presented its analysis in its reply, if not in its opening comments, and it should have disclosed all of the relevant information necessary to review and verify that analysis. We understand that Verizon has met with the Commission's staff to explain its analysis. If Verizon there or elsewhere disclosed any underlying information that is not fully disclosed in its *ex partes*, it should place that information in the public record immediately. Even that, however, is only a second best solution - AT&T continues to have serious reservations about such critical issues being adjudicated exclusively on an *ex parte* basis.

Given the lack of supporting information, it is obviously impossible to identify all of the ways in which Verizon's "analysis" departs from the competitive realities of the real world, in which competitors who have every incentive to pursue profitable entry have determined that profitable entry is not possible in Massachusetts. However, other Verizon public filings confirm that it is Verizon, and not WorldCom, that has grossly misrepresented the relevant costs and revenues available to any CLEC presently seeking to serve residential customers in Massachusetts.

Verizon's Estimate of CLEC Costs is Too Low - Verizon can arrive at its unreasonably low switching usage cost figure, for example, only by basing its calculations on minutes of use that are much lower than are generated by the average Verizon customer. In this regard, attested Massachusetts usage data can be obtained from Verizon's annual DEM (or "dial equipment minutes") submissions to NECA (the same type of data employed by the Commission's Synthesis Cost Model). Although these NECA submissions report aggregated usage for residence and business lines, Verizon, at the Staff's request, recently supplied data from which average residential usage can be calculated. See September 27, 2000 *ex parte* Letter from Dee May to Ms. Magalie Roman Salas ("September 27 Verizon Ex Parte"). As explained in the attached declaration of Michael Lieberman ("Lieberman Decl."), with this Verizon data it is a matter of simple arithmetic to determine that an average Massachusetts residential customer will generate about [XXXX] gross DEMs per month in 2000. See Lieberman Decl. at ¶ 10. This is 28% more than used in Verizon's margin analysis. See September 27 Verizon Ex Parte.

Because of the rate structure for switching usage in Massachusetts, a proper margin analysis must correctly calculate and deduct the number of intraswitch minutes

from gross DEM figures before calculating chargeable monthly usage, and it must also correctly calculate the number of originating minutes. Verizon's analysis does neither correctly. First, Verizon assumes that a disproportionately large number of the (already understated) Massachusetts DEMs are "intraswitch" minutes. Indeed, Verizon assigns over *half* of all local minutes to the intraswitch category. See September 27 Verizon Ex Parte. This number is inconsistent with both Verizon's New York estimate provided in Verizon's Reply Declaration of Steven E. Collins ("Collins Decl.") and AT&T's actual experience in New York, where intraswitch minutes are barely [XX] percent of the total. Lieberman Decl. at ¶ 11. Second, Verizon's adjustment to isolate terminating intraswitch minutes in the Collins Decl. (at ¶ 10) is nearly 17.5 percent higher than the number of terminating intraswitch minutes presented in Verizon's September 27 ex parte. Taken together, the (a) understatement of gross DEMs; (b) the overstatement of the proportion of these DEMs that are intraswitch; and (c) the overstatement of the proportion of these intraswitch minutes that are terminating, result in errors that artificially reduce expected usage costs. Thus, although the average Massachusetts residential UNE-P customer would generate \$10.63/month in usage charges, significantly more than Verizon's unsupported cost figure of [XXXX]/month. See Lieberman Decl. ¶ 11.

Verizon's Estimate of CLEC Revenues is Too High – Despite the meager – and undocumented – information Verizon has provided, it is also clear that Verizon has overstated the revenues that a UNE-based CLEC could expect to receive. First, Verizon's "analysis" appears to assume that CLECs will receive, on average, about 13 percent more revenues than Verizon's ARMIS 43-03 and 43-08 reports show that Verizon itself receives for the very same services. See Lieberman Decl. at ¶ 19. One possible reason for Verizon's overstated revenue assumptions is that Verizon may be ignoring its own bundled offerings of local service and vertical features that give customers discounts off its à la carte prices. Because a CLEC must attract customers away from Verizon, a CLEC must expect to compete against Verizon's "best" offer, not just its standard offer, in determining its expected revenues. Moreover, Verizon's estimate of access saving "revenues" is substantially higher than CLEC estimates, and Verizon provides no information or explanation adequate to determine whether this is the result of inaccurately estimated usage or overstated rates (as might occur if Verizon used pre-CALLS access rates or attributed special access revenues to switched lines). Verizon also provides no support for its assertions regarding "Other" recurring revenues. Based upon AT&T's analysis, even if Verizon has not included nonrecurring service connection and termination revenue in its assumed "Other" revenues, Verizon's proffered figure exceeds its ARMIS accounting of "Other Local" revenues by 43 percent. See Lieberman Decl. at ¶ 16 and Exhibit 8. Finally, Verizon appears to include intraLATA toll revenues in its analysis of UNE-P entry into local markets. That is improper. In the real world, CLEC decisions to enter local markets are not based on assumptions that local service will be a "loss leader" for other competitive services.

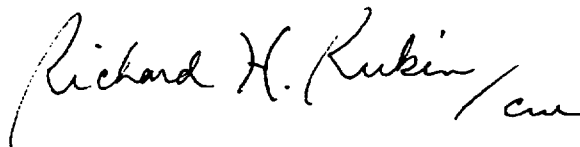
CLEC Entry is Unprofitable. Because of the very limited information supplied by Verizon, AT&T cannot possibly identify all of the errors in Verizon's margin analysis. Nevertheless, the bottom line is this: Verizon's analysis is unverifiable, unreliable and wrong in critical respects. As the attached declaration of Michael Lieberman confirms, when the relevant costs and revenues are properly determined, AT&T strongly agrees with WorldCom's conclusion that UNE-based entry is not profitable at Verizon's current Massachusetts UNE prices. Indeed, given these prices, it is AT&T's conclusion that there is no circumstance under which AT&T would consider providing a residential UNE-P service in Massachusetts.

In sharp contrast to Verizon's submissions, the data sources and assumptions underlying the attached analysis are clearly identified. The calculation of the relevant costs and revenues is explained step-by-step and supported by underlying spreadsheet calculations. And, as this analysis demonstrates, a CLEC contemplating statewide entry at the prevailing Massachusetts UNE prices could only expect a *gross* margin – before *any* retailing or operational costs are recovered – of between \$1.52 and \$3.78 per customer per month, depending upon the proportion of customers who choose a bundled versus an “a la carte” set of local services. *See Lieberman Decl.* at ¶ 20. In either case, the resulting margin would not even cover a CLEC's direct retailing costs, much less allow for a reasonable profit. Moreover, given that residential customers' local usage is increasing and access revenues are declining, the above margin, which is based on Year 2000 data, will only get worse in later years.

In sum, one need look no further than a straightforward margin analysis to recognize that Verizon's current UNE prices are far too high to support mass-market UNE-based offerings for the millions of residential consumers in Massachusetts. Simply stated, the conditions necessary to support competitive entry do not exist in Massachusetts. Even taking full account of all the revenues and benefits from being a local service provider, and imputing access savings realized by a long distance carrier, it would be profoundly uneconomic for any entrant to make a widespread offer of UNE-P based local services to Massachusetts residential consumers. In these circumstances, there can be no rational determination that Verizon has satisfied checklist item two or that the public interest would be served by granting this application.

In accordance with Section 1.1206(a)(1) of the Commission's rules, two copies of this Notice are being submitted to the Secretary of the Commission for inclusion in the public record for the above-captioned proceeding. The confidential version of this document and the enclosures are being separately filed.

Sincerely,

Handwritten signature of Richard H. Rubin in cursive script, followed by a small 'cm' or similar mark.

Attachments

cc: R. Lerner
C. Canteen
J. McKee
R. Kwiatkowski

MA Margin Analysis – A Losing Proposition for Competition

AT&T Presentation to FCC

November 29, 2000

Which One Is True?

- “Whoever is buying [AT&T’s] \$24.95 [basic local services] product [in New York] knows they’re not making any money on it” - *Verizon Co-CEO statement to financial press, 8/15/2000*
- “[Verizon’s] UNE-P rate allows market entry [in Massachusetts]” – *Verizon 11/21/2000 ex parte to FCC*
- It is unlawful “to make any untrue statement of a material fact or to omit to state a material fact necessary in order to make the statements made, in light of the circumstances under which they were made, not misleading . . . in connection with the purchase or sale of any security” *SEC Rule 10b-5 (17 C.F.R. § 240.10b-5)*

Verizon's Margin "Analyses" Are Unsupported and Wrong

- Verizon's ex parte black box "analyses" are not supported by adequate underlying data, calculations or assumptions
- Verizon's "analyses" cannot be verified by the Commission or any commenter
- Verizon's conclusions are inconsistent with its other public data and CLEC experience in the real world

Specific Errors in Verizon's Analysis

- CLEC costs are understated
 - Total MOUs are too low
 - Calculation of billable minutes is too low
 - Calculation of usage costs is off by \$4/mo.
- Expected CLEC revenues are overstated
 - Verizon projects higher revenues for CLECs than Verizon itself receives for the same services
 - Verizon appears to ignore its own “bundled” local offers
 - Verizon appears to overstate “other” revenue
 - Verizon improperly includes intraLATA toll revenues

CLECs Cannot Profitably Serve Residential Customers

- AT&T's documented correction of detectable errors in Verizon's analysis shows that the average gross margin per residential customer is between \$1.52 and \$3.78 per month
- These margins cannot cover a CLEC's retail costs, much less generate a profit
- CLECs cannot profitably serve the mass market in Massachusetts using UNEs
- This conclusion is validated by the fact that no CLEC is entering the residential market on a statewide basis

Conclusion

- The Massachusetts market is closed to competition, because CLECs cannot profitably serve residential customers
- Verizon has failed to prove that it complies with Checklist Item 2 or the Public Interest Test

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BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

In the matter of)
Application by For Provision of In-Region,)
InterLATA Services) CC Docket No. 00-176
In Massachusetts)

DECLARATION OF MICHAEL LIEBERMAN
ON BEHALF OF AT&T CORP.

Michael Lieberman does hereby depose and states as follows:

I. Background and Summary

1. My name is Michael R. Lieberman. I am a District Manager in AT&T's Law and Government Affairs organization. In this position I am responsible for providing financial and industry analysis in the development of AT&T's policies related to the costing and pricing of local telecommunications services. I was AT&T's primary participant in the development of the HAI/Hatfield Model of forward looking economic costs of local exchange networks and services and have been responsible for evaluating other costing models and methodologies such as the BCPM and the FCC's Synthesis Model. I have a Bachelor's degree in mathematics and a Master's degree in statistics from the State University of New York at Stony Brook. Prior to joining AT&T as a statistical consultant in 1978, I was a bio-statistical consultant with Carter-Wallace of Cranbury New Jersey. My testimony relates primarily to the evaluation of the profit potential for residential UNE-P competition in Massachusetts.

2. As I demonstrate below, I agree fully with WorldCom's conclusion that the financial conditions necessary to support residential competitive entry do not exist in Massachusetts. This is because Verizon's Massachusetts UNE prices are far too high to support

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mass-market UNE-based offerings. Even after taking full account for all of the direct and ancillary revenues and benefits from being a local service provider, it would be profoundly uneconomic for AT&T or any other entrant to make a statewide offer of UNE-P based local services to the millions of residential customers in Massachusetts. As I am aware of no claims by Verizon that its own local operations are unprofitable, this provides powerful evidence that Verizon's Massachusetts UNE rates are not properly cost-based.

II. Massachusetts Margin Analysis

3. At current prices, WorldCom is indisputably correct that UNE-based residential competition is not viable in Massachusetts. Demonstrating that this is so is straightforward. The viability of a UNE-based offering – that is, whether it makes sense for any entrant to commit its shareholders' capital to that enterprise – turns on the same type of analysis as is used to evaluate any other substantial investment decision. Capital is scarce and must be devoted to its highest-valued uses. Thus, a carrier considering whether to enter the local services business in a state (or to continue to participate in that business) must determine whether revenues attributable to the service will exceed the costs of providing the service by an amount sufficient to generate a return that is commensurate with the expectations of investors concerning risks and returns and with competing uses for the capital.

4. There are essentially three steps to any such analysis: (1) identifying and estimating all costs of providing the service, (2) identifying and estimating all revenue opportunities from providing the service, and (3) deriving from these estimated "cash flows" standard financial measures that allow the investment opportunity to be assessed and compared to alternative investment opportunities.

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5. As always with line-of-business financial analyses of this type, certain assumptions must be made. However, there is much less room for debate about the appropriateness of assumptions in the UNE-P context than is ordinarily the case, because many of the relevant “inputs,” including retail local service prices, UNE prices, and access prices are publicly reported and directly verifiable. As a result, I am confident that the following analysis paints an accurate picture of the barrier existing UNE prices in Massachusetts pose to residential competition in that state. I should note that economically rational carriers typically use this same type of analysis in making their actual business decisions whether to provide UNE-P based service in particular markets. And the answer supplied by this analysis – that, at current UNE prices, a mass-market UNE-Platform-based offering is not viable in Massachusetts – is not even a close question. This clear conclusion is generated despite the fact that this analysis has used, to the extent reasonable, data that Verizon itself has proffered in this proceeding, and in public reports to regulators.¹

6. The remainder of my declaration is organized into three subsections. The first subsection describes the costs a CLEC would incur in connection with a residential UNE-Platform offering in Massachusetts. The second describes the associated revenues a CLEC could expect to receive from such an offering. And the third translates these cash flows into margins – a type of financial measure upon which business decisions are commonly based. Here, the facts show that profitable UNE-Platform-based residential offerings simply are not possible in Massachusetts absent substantial UNE rate reductions. Exhibit 1 to my declaration, entitled “UNE Connectivity Margin for Verizon Massachusetts,” summarizes the results of my cost, revenue and margin analysis. I refer to and generally follow the order of this Exhibit 1 in the

¹ My use of these Verizon data shall not be construed as my agreement to their veracity.

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discussion below. I also refer to supporting Exhibits 2-9, which provide additional detail on the assumptions and calculations underlying Exhibit 1.

7. **Costs.** There are two basic categories of costs associated with UNE-Platform-based services: (1) “connectivity” costs, or the costs associated with purchasing the necessary network elements from the incumbent, and (2) the entrant’s own internal costs of running its local services business, including marketing, customer care, developing, maintaining and operating computer support systems, and administration. My analysis focuses on the former, which are readily identifiable and verifiable.

8. My analysis of connectivity costs uses the same October 13 tariffed rates that Verizon now relies upon in support of its Section 271 application.

9. The Verizon rates for UNE loops are \$7.54/month in Zone 1, \$14.11 in Zone 2, and \$16.12 in Zone 3 and \$20.04 in Zone 4. The distribution of residence loops across density zones must be determined to generate a statewide average cost for residence lines. My analysis assumes that residence loops are distributed in the same proportion as residence lines. In contrast, Verizon appears to apportion residence loops across zones based on the relative numbers of total lines (business and residential) in these zones. This biases downward Verizon’s statewide average estimate of residential loop costs, because relatively fewer residence lines are in the urban, low-cost zones than are business lines. For UNE ports, new entrants pay \$2.00/month in all zones. These and the other relevant UNE rates are listed in Exhibit 2 to my declaration.

10. Most other network elements are charged on a usage basis. Thus, although the per minute rates are published, any analysis of UNE-based service profitability requires usage data and assumptions. Massachusetts usage data can be obtained from Verizon’s annual DEM

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(or “dial equipment minutes”) submissions to NECA (the same type of data employed by the Commission’s Synthesis Cost Model). Verizon’s 1999 reported DEMs can be converted to chargeable DEM-equivalent conversation minutes for the year 2000 through a four-step process detailed in Exhibit 4.

1. Divide reported DEMs by reported switched lines from ARMIS 43-08 and by 12 to get usage per line per month.
2. Grow the 1999 figures by the actual (log-linear) growth rate in usage between 1995 and 1999 to derive expected 2000 usage figures.
3. Because the DEM submissions to NECA report only aggregated usage data for all lines (business and residence), it is then necessary to perform a conversion to average residential usage. Verizon’s September 27, 2000 ex parte provides the data required to perform this conversion.
4. The same Verizon ex parte provides the outbound to total usage relationship necessary to estimate the split between inbound and outbound minutes reflected in the total MOU. (Because UNE charges for inbound local minutes are counterbalanced exactly by reciprocal compensation due to the CLEC, the standard ILEC protocol is to exclude inbound local minutes from UNE charges.)

The result of these straightforward arithmetical calculations is an average residential originating usage figure for 2000 that retains the non-conversation time that is reflected in the reported DEMs and is billed to UNE purchasers. The relevant calculations for local, intraLATA toll, intrastate interLATA, and interstate usage are detailed in Exhibit 4 to my declaration. In sum, they show that, contrary to Verizon’s claim in its September 27 ex parte of [XXXX] gross residential MOU, a CLEC would, in reality, expect approximately [XXXX] gross MOU, a 28 percent increase over Verizon’s unsupported figure. After these figures are converted into chargeable minutes, this gap grows even larger: [XXXX] MOU versus [XXXX] MOU. Although the Verizon data are poorly documented, it appears that the discrepancy may be caused

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by Verizon's use of outdated data. Indeed, a comparison to Verizon's public DEM per line data suggests that Verizon may be using figures that are four to five years old. *See* Exhibit 9.

11. Once a Massachusetts customer's expected minutes of use are determined in this fashion, the minutes of use for each category (local, intraLATA, toll etc.) must be further apportioned to reflect the fact that some local calls are "intraswitch" calls (where the calling and called parties are served by the same switch), some are "interswitch" calls, and of these interswitch calls, some are routed directly between the two local switches while others are routed via a tandem. There are two DEMs associated with each intraswitch conversation minute, but only one chargeable minute, so half of the DEMs associated with intraswitch minutes must be removed. For purposes of my margin analysis, I assume that approximately 35 percent of local calls in Verizon's network will be intraswitch calls. In contrast, Verizon assigns [XXXXXXX] of all Massachusetts local minutes to intraswitch calling. That undocumented figure is inconsistent with Verizon's New York estimate, as well as AT&T's actual New York experience, where local customers' intraswitch usage is only about [XX] percent of the total.² Consistent with the Commission's Synthesis Model, I also assume that approximately 2 percent of local interswitch minutes and 20 percent of intraLATA toll and interLATA minutes are tandem-routed. The calculated intraswitch, interswitch, and tandem conversation minutes (or, in the case of toll calls, the toll direct and toll tandem conversation minutes) are then multiplied by the current corresponding tariffed usage charges in Massachusetts to arrive at expected monthly usage costs

² In its September 27 ex parte, Verizon reports figures that imply that over 50% of total minutes in Massachusetts are intraswitch minutes. In contrast, Verizon's Reply Declaration of Steven E. Collins states that intraswitch calling is roughly [XX]% in Massachusetts and [XX]% in New York. Verizon provides no explanation or evidence for its much higher intraswitch estimate in Massachusetts. If the New York intraswitch to total DEM ratio is applied to the Massachusetts DEMs and compared to local minutes of use only, the result would be [XX]%. Nonetheless, I use the 35% value.

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per line, as detailed in Exhibit 3 to my declaration.³ The total monthly usage charge per line, which is listed in Exhibit 1, is [XXXXXX]. This is 59 percent greater than the [XXXXXX] figure asserted by Verizon.

12. The next line item is the Account Maintenance Charge of \$0.57/month. That figure is an actual CLEC cost that must be paid to Verizon. Verizon simply ignores these costs in its analysis.

13. In total, I calculate that the average recurring monthly connectivity costs (loop plus usage and account maintenance) to serve a Massachusetts residential customer is \$28.34. This is an average of the monthly connectivity costs for Zones 1 (\$20.74), 2 (\$27.31), 3 (\$29.32), and 4 (\$33.24) weighted by the number of estimated residence lines in each zone. See Exhibit 1. When the non-recurring migration charge per customer of \$3.10 is added (amortized over three years), the total monthly platform cost in Massachusetts is \$28.43 (and ranges from \$20.83 in Zone 1 to \$33.33 in Zone 4).

14. In addition to purchasing connectivity from the incumbent LEC, a UNE-Platform-based provider must sell and bill its service, provide customer care, and generally run its local services business. AT&T's actual experience in New York has been that these internal "running the business" costs (including costs associated with maintaining and updating the necessary databases and systems) are quite significant, particularly in the early years. As demonstrated below, however, my analysis fully supports WorldCom's earlier demonstration that the

³ In calculating the usage charge, I included the relevant traffic-sensitive costs not part of local switching (e.g., signaling, transport, and tandem switching). These calculations are contained in Exhibits 3 and 4. The signaling charge calculations, which represent a very small portion of total usage charges, are assessed per message. Exhibit 4 shows how I converted from a per message to a per minute cost.

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Massachusetts “gross” margins (*i.e.*, margins before considering internal retailing and other “running the business” costs) are so low that it is obvious that a CLEC cannot profitably provide broad-based UNE-P residential service in Massachusetts.

15. **Revenues.** The Verizon basic local service rates that UNE-Platform-based providers must meet to be competitive result in revenue ranging from \$17.83/month in Zone 4 to \$23.00/month in Zone 1.⁴ This is obviously much less than even the direct connectivity costs that a new entrant must pay to Verizon.

16. There are, of course, other revenue opportunities to consider. For example, a local service provider can expect to sell vertical features to many customers. Verizon’s tariffed rates for these services (with which a new entrant must obviously be competitive), adjusted for their penetration rates are listed in Exhibit 1. Based upon data provided by TNS Telecoms (formerly PNR), an established telecommunications market research firm whose data are used by the Commission and most major telecommunications firms, Verizon’s Massachusetts penetration rates for Caller ID, Call Waiting, and Call Forwarding are [XX] percent, [XX] percent and [XX] percent, respectively. Based on these percentages and Verizon’s tariffed rates, a new entrant can expect, on average, to receive about \$3.39/month in vertical feature revenue. The federal Subscriber Line Charge brings in an additional \$4.35/month/line. Total expected customer revenue therefore averages a little more than \$27/month (ranging from \$25.63/month in Zone 4 to a little less than \$31/month in Zone 1). These revenue calculations match closely with the Local plus SLC plus Other Local revenues that Verizon reports in ARMIS 43-04 for 1999 when

⁴ These reflect retail 1FR rates as reported by CCM Rate Information, Section 3.1, Sheet 3 (effective January 1, 1999) listed in Exhibit 6. The 1FR rates by wire center are weighted together to estimate the average basic local service revenue per line by UNE zone as listed in Exhibit 7.

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apportioned between residential and business lines in the same ratio that Verizon suggests in its September 27 ex parte (*i.e.*, [XXXXXX] statewide residential average). See Exhibit 8.

17. A UNE-Platform-based provider also earns access revenues for originating and terminating long distance calls. My analysis recognizes access revenues even when (as is often the case) the customer's long distance carrier is also its local carrier and there are therefore no actual access revenues, but only implicit access savings. Estimating access revenues is a simple matter of multiplying expected toll minutes (derived from the Verizon DEM data described above) by the relevant access charges that a CLEC can replace with UNEs.⁵ These calculations, which produce estimated monthly per line access charge revenue of \$4.83/month, are detailed in Exhibit 5.

18. In total, a CLEC could expect to receive revenues that average \$32.21/line/month from a UNE-based service in Massachusetts (or between \$30.46 and \$35.63 /line/month, depending upon the density zone).

19. I should also note that it is possible to compare the revenues that Verizon alleges a CLEC using UNE-P will earn with the actual revenues that Verizon has earned from selling the same services. Verizon reports these revenues to the Commission in its ARMIS 43-04 submissions. Exhibit 8 shows the ARMIS revenues that Verizon has reported for its Massachusetts switched local exchange, SLC, toll, access and other local services. These revenues amounted to \$2,349,246,000 in 1999. But when the monthly revenue figures for residence and business service proffered by Verizon in its September 27 ex parte margin analysis are multiplied by the numbers of residence and business lines that Verizon reported to the Commission in its 1999 ARMIS 43-08 reports, this suggests that Verizon believes that

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\$2,651,994,000 of revenue is available to CLECs -- or 13% *more* revenue than Verizon earned itself from selling these services. Thus, Verizon's margin analysis appears to overstate significantly revenues available from UNE-P local offers.

20. **Margin.** There are many standard financial measures for assessing profitability of investing (or continuing) in a line of business. The simplest is to compare expected costs with expected revenues to determine a margin per line. A "gross" UNE-P margin can be determined by subtracting expected direct connectivity costs from expected revenues. A "net" UNE-P margin can be determined by subtracting all expected costs (connectivity and "running the business" costs) from expected revenues. The statewide average expected gross margin is \$3.78 — an amount that is clearly insufficient to cover any CLEC's internal retail costs. The gross margin is larger in the metro rate zone, but the small number of available customers in this zone (just 4 percent of statewide residential lines) is not adequate to support UNE-based entry when customer care and other costs are considered — as they must be in determining whether it makes sense to market UNE-Platform-based local services. Targeted entry into this one zone is also unlikely to be attractive because a revenue-neutral rate rebalancing by Verizon that more closely aligns its local rates with their underlying costs would immediately sink the venture. Moreover, the local service revenues used to estimate these margins are likely overstated because they do not reflect the discounts that Verizon offers to customers who purchase certain bundles of local service and vertical features. If one assumes that [XX]% (equal to the assumed Caller ID penetration rate) of CLEC customers must be attracted away from Verizon's competing bundled offering, then the average expected revenue declines to \$29.95 and the average margin drops to only \$1.52. Furthermore, because customer usage has been growing

⁵ Dedicated transport access charges are not included because a CLEC does not avoid these

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over time and access revenues/savings have been declining, any CLEC margins computed for years beyond 2000 will be even smaller.

Connectivity Margin for Verizon-Massachusetts

COSTS	Statewide Average	Zone 1	Zone 2	Zone 3	Zone 4
Zone weights		4.0%	39.6%	52.5%	4.0%
Loop	\$15.14	\$7.54	\$14.11	\$16.12	\$20.04
Port	\$2.00	\$2.00	\$2.00	\$2.00	\$2.00
Usage	\$10.63	\$10.63	\$10.63	\$10.63	\$10.63
Account maintenance	\$0.57	\$0.57	\$0.57	\$0.57	\$0.57
Platform - Recurring Cost	\$28.34	\$20.74	\$27.31	\$29.32	\$33.24
Amortization of \$3.10 Migration Fee	\$0.09	\$0.09	\$0.09	\$0.09	\$0.09
Total Platform (w/NRC)	\$28.43	\$20.83	\$27.40	\$29.41	\$33.33

REVENUES **a la Carte Using Bundles***

Basic Local Svc

Zone 1	\$23.00	\$25.20
Zone 2	\$21.24	\$24.03
Zone 3	\$18.19	\$18.19
Zone 4	\$17.83	\$17.83
Statewide Avg.	\$19.57	\$20.77

Features

Caller ID (Name&Number)
Call Waiting
Call Forwarding

Sub. Line Chg.	\$4.35	\$4.35
Access	\$4.83	\$4.83

Total Revenue

Zone 1	\$35.63	\$34.38
Zone 2	\$33.88	\$33.21
Zone 3	\$30.82	\$27.37
Zone 4	\$30.46	\$27.01
Statewide Avg.	\$32.21	\$29.95

Assumed Feature
Penetration Rates

MARGINS **a la Carte Using Bundles***

Zone 1	\$14.81	\$13.56
Zone 2	\$6.48	\$5.82
Zone 3	\$1.42	(\$2.04)
Zone 4	(\$2.86)	(\$6.32)
Residence Statewide	\$3.78	\$1.52
Connectivity margin	12%	5%

* This column assumes that the proportion of customers that buy bundles equals the proportion that purchases Caller ID.

IV. Conclusion

access charges when providing UNE-based local service.

REDACTED -FOR PUBLIC INSPECTION

21. In short, one need look no further than simple gross margin analyses to recognize that current UNE prices in Massachusetts are far too high to support mass market UNE offerings. These analyses conclusively demonstrate that the conditions necessary to support competitive entry do not exist in Massachusetts. Even taking full account of all the revenues and benefits from being a local service provider, it is profoundly uneconomic for any new entrant to make a widespread residential offer of UNE-P based local services.

VERIFICATION

I, Michael Lieberman, declare under penalty of perjury that the foregoing is true and correct.

A handwritten signature in cursive script, appearing to read "Michael Lieberman", is written over a horizontal line.

Michael Lieberman

Executed on November 30, 2000

Connectivity Margin for Verizon Massachusetts

Zone weights		4.0%	39.6%	52.5%	4.0%
Loop	\$15.14	\$7.54	\$14.11	\$16.12	\$20.04
Port	\$2.00	\$2.00	\$2.00	\$2.00	\$2.00
Usage	\$10.63	\$10.63	\$10.63	\$10.63	\$10.63
Account maintenance	\$0.57	\$0.57	\$0.57	\$0.57	\$0.57
Platform - Recurring Cost	\$28.34	\$20.74	\$27.31	\$29.32	\$33.24
Amortization of \$3.10 Migration Fee	\$0.09	\$0.09	\$0.09	\$0.09	\$0.09
Total Platform (w/NRC)	\$28.43	\$20.83	\$27.40	\$29.41	\$33.33

REVENUES A La Carte Using Bundles *

Basic Local Svc

Zone 1	\$23.00	\$25.20
Zone 2	\$21.24	\$24.03
Zone 3	\$18.19	\$18.19
Zone 4	\$17.83	\$17.83
Basic Local Svc -Statewide	\$19.57	\$20.77

Features

Caller ID (Name & Number)
Call Waiting
Call Forwarding

Sub. Line Chg.	\$4.35	\$4.35
Access	\$4.83	\$4.83

Total Revenue

Zone 1	\$35.63	\$34.38
Zone 2	\$33.88	\$33.21
Zone 3	\$30.82	\$27.37
Zone 4	\$30.46	\$27.01
Total Revenue -Statewide	\$32.21	\$29.95

Feature
Penetration Rate

Zone 1	\$14.81	\$13.56
Zone 2	\$6.48	\$5.82
Zone 3	\$1.42	(\$2.04)
Zone 4	(\$2.86)	(\$6.32)
Residence Statewide	\$3.78	\$1.52
Connectivity margin	12%	5%

When cost effective, customers use bundled offers and all feature use occurs as 3 feature bundle at Caller ID

Verizon Massachusetts UNE Rates

Element	Loop 2 Wire Analog				Port 2-Wire Analog			
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 1	Zone 2	Zone 3	Zone 4
UNE Rate	\$7.54	\$14.11	\$16.12	\$20.04	\$2.00	\$2.00	\$2.00	\$2.00

Weighted Averages of Traffic Sensitive UNE Rates

Element	Rates
Unbundled Local Switching	\$ 0.004010
Unbundled Shared Trunk Port	\$ 0.000697
Unbundled Local Common Transport	\$ 0.001773
Unbundled Toll Common Tandem Transport	\$ 0.003062
Shared Tandem Trunk Port	\$ 0.002132
Tandem Usage	\$ 0.001105
Unbundled Telephone Company Reciprocal Compensation	\$ 0.004705
Unbundled TC Reciprocal Compensation	\$ 0.011150

**Verizon - Massachusetts [October 13 and 18, 2000 Port,
Local Switching and Transport usage rate reduction filing]**

				weights	wld avg	
Shared Tandem Trunk Port						
	Current Rates	Proposed Rates	Difference			
Peak	0.003528	0.002646	(0.000882)	0.750000		
Off-Peak	0.000784	0.000588	(0.000196)	0.250000	0.002132	
Tandem Usage						
	Current Rates	Proposed Rates	Difference			
Peak	0.001586	0.001190	(0.000396)	0.750000		
Off-Peak	0.001134	0.000851	(0.000283)	0.250000	0.001105	
Line Ports						
	Current Rates	Proposed Rates	Difference			
Metro	5.52	2.00	(3.52)	4%		
Urban	5.00	2.00	(3.00)	40%		
Suburban	3.95	2.00	(1.95)	52%		
Rural	6.96	2.00	(4.96)	4%		
Unbundled Shared Trunk Port						
	Current Rates	Proposed Rates	Difference			
Metro - Peak	0.001703	0.000866	(0.000837)	0.750000		
Metro - Off-Peak	0.000379	0.000189	(0.000190)	0.250000	0.000697	1%
Urban - Peak	0.001820	0.000866	(0.000954)	0.750000		
Urban - Off-Peak	0.000404	0.000189	(0.000215)	0.250000	0.000697	40%
Suburban - Peak	0.002090	0.000866	(0.001224)	0.750000		
Suburban - Off-Peak	0.000464	0.000189	(0.000275)	0.250000	0.000697	55%
Rural - Peak	0.002093	0.000866	(0.001227)	0.750000		
Rural - Off-Peak	0.000465	0.000189	(0.000276)	0.250000	0.000697	4%
					\$ 0.000697	
Unbundled Local Switching						
	Current Rates	Proposed Rates	Difference			
Metro - Peak	0.004647	0.004647	0.000000	0.750000		
Metro - Off-Peak	0.001872	0.001872	0.000000	0.250000	0.003953	
Urban - Peak	0.007401	0.004724	(0.002677)	0.750000		
Urban - Off-Peak	0.003516	0.001872	(0.001644)	0.250000	0.004011	
Suburban - Peak	0.009549	0.004724	(0.004825)	0.750000		
Suburban - Off-Peak	0.005282	0.001872	(0.003410)	0.250000	0.004011	
Rural - Peak	0.014277	0.004724	(0.009553)	0.750000		
Rural - Off-Peak	0.008186	0.001872	(0.006314)	0.250000	0.004011	
					\$ 0.004009	
Unbundled Tandem Transport						
	Current Rates	Proposed Rates	Difference			
Metro - Peak	0.00178	0.001335	(0.000445)	0.750000		
Metro - Off-Peak	0.00040	0.000300	(0.000100)	0.250000	0.001076	
Urban - Peak	0.00178	0.001335	(0.000445)	0.750000		
Urban - Off-Peak	0.00040	0.000300	(0.000100)	0.250000	0.001076	
Suburban - Peak	0.00178	0.001335	(0.000445)	0.750000		
Suburban - Off-Peak	0.00040	0.000300	(0.000100)	0.250000	0.001076	
Rural - Peak	0.00178	0.001335	(0.000445)	0.750000		
Rural - Off-Peak	0.00040	0.000300	(0.000100)	0.250000	0.001076	

\$ 0.001076

Unbundled Local Common Transport					
	Current Rates	Proposed Rates	Difference		
Metro - Peak	0.003483	0.0022010	(0.001282)	0.750000	
Metro - Off-Peak	0.000779	0.0004890	(0.000290)	0.250000	0.001773
Urban - Peak	0.003600	0.0022010	(0.001399)	0.750000	
Urban - Off-Peak	0.000804	0.0004890	(0.000315)	0.250000	0.001773
Suburban - Peak	0.000387	0.0022010	0.001814	0.750000	
Suburban - Off-Peak	0.000864	0.0004890	(0.000375)	0.250000	0.001773
Rural - Peak	0.003873	0.0022010	(0.001672)	0.750000	
Rural - Off-Peak	0.000865	0.0004890	(0.000376)	0.250000	0.001773
				\$	0.001773

Unbundled Toll Common Tandem Transport					
	Current Rates	Proposed Rates	Difference		
Metro - Peak	0.005567	0.0037640	(0.001803)	0.750000	
Metro - Off-Peak	0.001399	0.0009540	(0.000445)	0.250000	0.003062
Urban - Peak	0.005684	0.0037640	(0.001920)	0.750000	
Urban - Off-Peak	0.001424	0.0009540	(0.000470)	0.250000	0.003062
Suburban - Peak	0.005954	0.0037640	(0.002190)	0.750000	
Suburban - Off-Peak	0.001484	0.0009540	(0.000530)	0.250000	0.003062
Rural - Peak	0.005957	0.0037640	(0.002193)	0.750000	
Rural - Off-Peak	0.001485	0.0009540	(0.000531)	0.250000	0.003062
				\$	0.003062

Tandem Transit Switching					
	Current Rates	Proposed Rates	Difference		
Peak	0.00864	0.006482	(0.002160)	0.750000	
Off-Peak	0.002702	0.002027	(0.000675)	0.250000	0.005368

Unbundled Telephone Company Reciprocal Compensation					
	Current Rates	New Proposed 10-18-00 Rates	Difference		
Metro - Peak	0.006350	0.005513	(0.000837)	0.750000	
Metro - Off-Peak	0.002251	0.002061	(0.000190)	0.250000	0.004650
Urban - Peak	0.009221	0.005590	(0.003631)	0.750000	
Urban - Off-Peak	0.003920	0.002061	(0.001859)	0.250000	0.004708
Suburban - Peak	0.011639	0.005590	(0.006049)	0.750000	
Suburban - Off-Peak	0.005746	0.002061	(0.003685)	0.250000	0.004708
Rural - Peak	0.016370	0.005590	(0.010780)	0.750000	
Rural - Off-Peak	0.008651	0.002061	(0.006590)	0.250000	0.004708
				\$	0.004705

Unbundled TC Reciprocal Compensation					
	Current Rates	New Proposed 10-18-00 Rates	Difference		
Metro - Peak	0.016772	0.013330	(0.003442)	0.750000	
Metro - Off-Peak	0.005353	0.004388	(0.000965)	0.250000	0.011095
Urban - Peak	0.019643	0.013407	(0.006236)	0.750000	
Urban - Off-Peak	0.007022	0.004388	(0.002634)	0.250000	0.011152
Suburban - Peak	0.022061	0.013407	(0.008654)	0.750000	
Suburban - Off-Peak	0.008848	0.004388	(0.004460)	0.250000	0.011152
Rural - Peak	0.026792	0.013407	(0.013385)	0.750000	
Rural - Off-Peak	0.011753	0.004388	(0.007365)	0.250000	0.011152
				\$	0.011150

Massachusetts - Verizon		UNE Unit Cost Development - Rate Application									
Reflects 10/00 rate changes		Local Service			Intralata toll		Intrastate InterLATA		Interstate InterLATA		
		Intraswitch	Interswitch		On ILEC Network		Direct	Tandem	Direct	Tandem	
			Direct	Tandem	Direct	Tandem					
EO Switching	\$ 0.004010	1	1	1	1	1	1	1	1	1	
EO Trunk Port	\$ 0.000697		1	1	1	1	1	1	1	1	
Blended Xport	\$ 0.001773	0	1	1							
Common Switched xport	\$ 0.001076				1	2		1		1	
Tandem switching usage	\$ 0.005368					1		1		1	
Reciprocal Comp	\$ 0.004705	0	1	1	0	0					
Signalling Transport	\$ 0.000185	0.2500	0.2500	0.2500	0.2500	0.2500	0.2500	0.2500	0.2000	0.2000	
Cost Per MOU		\$ 0.004057	\$ 0.011232	\$ 0.011232	\$ 0.005830	\$ 0.012274	\$ 0.004753	\$ 0.011198	\$ 0.004744	\$ 0.011189	
MOU											
Cost per Line											

MOU Assumptions (Year 2000)					Tandem-
	Outbound	Inbound	Total	Interswitch Percent	Routed Percent
Local				35%	2%
IntraLATA Toll				0%	20.0%
Intrastate InterLATA				0%	20.0%
Interstate InterLATA				0%	20.0%
Total					

Signaling Factor Development			
	Conversation MOU/MSG	Completion rate	Calls per MOU
Local	4	1	0.2500
IntraLATA Toll	4	1	0.2500
Intrastate InterLATA	4	1	0.2500
Interstate InterLATA	5	1	0.2000

UNE Usage Cost Per Line by Service and 2000 MOU Development

	% MOU	UNE Cost	Cost per Line
Local			
Intrastate local	35%	\$0.004057	
Interstate direct local	64%	\$0.011232	
Interstate tandem local	1%	\$0.011232	
		\$0.008720	\$7.24
IntraLATA Toll			
On ILEC Network			
intralata toll direct	80%	\$0.005830	
intralata toll tandem	20%	\$0.012274	
		\$0.007118	\$0.81
Intrastate InterLATA			
interlata toll direct	80%	\$0.004753	
interlata toll tandem	20%	\$0.011198	
		\$0.006042	\$0.70
Interstate InterLATA			
interlata toll direct	80%	\$0.004744	
interlata toll tandem	20%	\$0.011189	
		\$0.006033	\$1.88
Total Usage Per Line			\$10.63

Development of 2000 Outbound MOU

	1999 DEM (M)	1999 DEM/Li/Mo	1995 to 1999 Log-Linear Growth Rate	Total 2000 DEM/ Li/Mo	Res /Total *	Res MOU	Outbound / Total *	Outbound MOU	Inbound MOU
LOCAL	70,653	1,272	6.6%	1,356					
INTRASTATE	12,052	217	-6.1%	204					
IntraLATA Toll	5,715	103		97					
Intrastate Access	6,337	114		107					
INTERSTATE	15,788	284	1.5%	289					
TOTAL	98,493	1,774		1,848					

* Derived from Dec May 9/27 Usage Data

Total 1999 Switched Access Lines (M)	4.628
--------------------------------------	-------

Massachusetts - Verizon MOU, Lines, Access and SLC Rates

Access Rates

	WITHOUT DEDICATED TRANSPORT				WITH DEDICATED TRANSPORT		% MINUTES ACCESS TANDEM
	INTERSTATE		INTRASTATE		INTRASTATE		
	ORIGINATING	TERMINATING	ORIGINATING	TERMINATING	ORIGINATING	TERMINATING	
Current 2000							20.0%
Average 2001							20.0%

note: Access Rates are average rate per year

Intrastate terminating ccl + LS

Gross Access Revenue per line per mo

	Intrastate	Interstate	Total
Current 2000			\$4.83
Average 2001			\$4.47

AMOU

	Outbound	Inbound/term total
IntraLATA Toll		
Intrastate InterLATA		
Interstate InterLATA		

Subscriber Line Charge

Year	July	Average Year
1999	\$3.50	
2000	\$4.35	\$3.93
2001	\$5.00	\$4.68
2002	\$5.00	\$5.00

Lines by UNE Zone

ZONE	Residential	Business	Total Switched
1	113,573	213,358	326,931
2	1,135,013	578,452	1,713,465
3	1,504,739	742,366	2,247,105
4	113,717	44,610	158,327
Total	2,867,042	1,578,786	4,445,828
% OF TOTAL			
1	4.0%	13.5%	7.4%
2	39.6%	36.6%	38.5%
3	52.5%	47.0%	50.5%
4	4.0%	2.8%	3.6%
Total	100%	100%	100%

Verizon Line counts from 1997 USF data request

Massachusetts Verizon Basic Local Rates

Local Rate Zones	CCMI Rate 1FR	1FR + TouchTone +Usage	# of Wire Centers	# of Exchanges
Boston Metro	\$16.85	\$21.91	37	43
Eastern	\$16.85	\$17.84	166	159
Western	\$16.85	\$20.61	63	58
Totals/Avg.		\$19.57	266	260

Notes:

1) TouchTone is \$0.98

2) In 41 exchanges where standard 1FR not available, used cheaper of 1MR and \$23 bundled usage offer.

3) Local Rate Effective date: 1/17/2000

Basic Local Rates and UNE Loop by UNE Zone

UNE Rate Zone	Res Lines *	UNE Loop Price	UNE Loop Cost	Average Local Rate **	Local Revenue by UNE Zone	# of Wire Centers
1	113,573	\$7.54	\$856,340	\$23.00	\$2,612,179	3
2	1,135,013	\$14.11	\$16,015,033	\$21.24	\$24,110,598	73
3	1,504,739	\$16.12	\$24,256,393	\$18.19	\$27,370,941	170
4	113,717	\$20.04	\$2,278,889	\$17.83	\$2,027,574	20
Totals/Avg.	2,867,042	\$15.14	\$43,406,655	\$19.57	\$56,121,292	266

Notes:

* Residence lines from Verizon 1997 USF Data Request

**In 41 exchanges where standard 1FR not available, used cheaper of 1MR and \$23 bundled usage offer.

Revenue Assumptions Used in Verizon's Margin Analyses Do Not Comport With Its ARMIS Data

	VZ-MA ARMIS	Revenues Assumed in Verizon's Margin Analyses				Comparison
	ARMIS 43-03 Revenue Data (for 1999)	Average Residence⁶	Average Business⁷	Residence + Business⁹	Implied Res + Bus Revenues¹⁰	Margin Analysis Relative to ARMIS
Local/SLC	\$1,378,705					
Local	\$1,084,625 ¹					
SLC	\$294,080 ²					
Toll/Access	\$686,384					
Toll	\$312,345 ³					
Access	\$374,039 ⁴					
Other	\$284,157 ⁵					11
Total	\$2,349,246					
Access Lines (K)⁸						

Sources:

- ¹ Basic Local Area plus Extended Original Area plus Local Settlements revenues (Rows 5001+5002+5069)
- ² End User revenues (Row 5081)
- ³ LD Message plus Inbound and Outbound Message plus Other LD and LD Settlements revenues (Rows 5100+5111+5112+5160+5169)
- ⁴ Switched Access plus State Access revenues (Rows 5082+5084)
- ⁵ Other Local revenues (Row 5060) — Includes service connection and termination charges
- ⁶ Verizon 11/21/2000 Ex Parte Letter, page 6 (comports with Verizon 9/27/00 Ex Parte letter)
- ⁷ Verizon 9/27/00 Ex Parte letter
- ⁸ Verizon ARMIS 43-08 Report (1999) — Excludes "Mobile" lines
- ⁹ Calculated by weighting Res and Bus revenues by relative access lines
- ¹⁰ Calculated by annualizing monthly revenues and multiplying by lines
- ¹¹ Because ARMIS "Other" revenues include nonrecurring revenues, the Margin Analysis' overstatement is likely even larger

Total DEM per Switched Line

Data provided by Verizon in attested reports to FCC and NECA

(A.1)	Total DEM (Local+Intrastate+Interstate) (M)					Regr Exp Growth	Projected 2000	Projected 2001
	1995	1996	1997	1998	1999			
VZ MA	75,398	77,781	85,699	93,193	98,493	7.41%	105,795	113,638
VZ NY	200,403	213,540	235,952	240,335	265,496	7.04%	284,199	304,220

Source: Monitoring Report, Table 8.10, September 2000: 1995-98
Verizon ARMIS 43-04, Row 1216 reports for MA and NY: 1999

(A.2)	Local DEM					Regr Exp Growth	Projected 2000	Projected 2001
	1995	1996	1997	1998	1999			
VZ MA	49,888	50,076	54,357	66,621	70,653	10.31%	77,939	85,976
VZ NY	157,308	166,056	183,535	186,989	208,755	7.09%	223,548	239,389

Source: Monitoring Report, Table 8.7, September 2000: 1995-98
Verizon ARMIS 43-04, Row 1216 reports for MA and NY: 1999

(A.3)	Intrastate Toll DEM					Regr Exp Growth	Projected 2000	Projected 2001
	1995	1996	1997	1998	1999			
VZ MA	12,478	14,118	16,707	11,364	12,052	-2.82%	11,712	11,381
VZ NY	10,657	12,417	17,162	17,304	19,319	16.43%	22,494	26,190

Source: Monitoring Report, Table 8.8, September 2000: 1995-98
Verizon ARMIS 43-04, Row 1216 reports for MA and NY: 1999

(A.4)	Interstate DEM					Regr Exp Growth	Projected 2000	Projected 2001
	1995	1996	1997	1998	1999			
VZ MA	13,033	13,587	14,635	15,208	15,788	5.09%	16,591	17,435
VZ NY	32,438	35,067	35,255	36,043	37,422	3.18%	38,613	39,842

Source: Monitoring Report, Table 8.9, September 2000: 1995-98
Verizon ARMIS 43-04, Row 1216 reports for MA and NY: 1999

(B)	Total Switched Lines (K)					Regr Exp Growth	Projected 2000	Projected 2001
	1995	1996	1997	1998	1999			
VZ MA - Re	2,692	2,749	2,809	2,895	2,924	2.19%	2,988	3,053
VZ MA - Bu	1,346	1,409	1,583	1,571	1,704	5.98%	1,806	1,914
VZ NY - Re	6,997	7,129	7,303	7,486	7,678	2.37%	7,860	8,047
VZ NY - Bu	3,666	3,923	4,217	3,905	4,252	2.96%	4,378	4,507

Source: Verizon ARMIS 43-08 Reports for MA and NY

(C)	Total DEM per Switched Line					Regr Exp Growth	Projected 2000	Projected 2001
	1995	1996	1997	1998	1999			
VZ MA	1,556	1,559	1,626	1,739	1,774	3.78%	1,841	1,910
VZ NY	1,566	1,610	1,707	1,758	1,855	4.35%	1,935	2,020

Source: Table (A.1) divided by Table (B)